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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,352	08/18/2000	Hidekazu Nagasawa	50090-237	5215

7590

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EXAMINER

TON, DAVID

ART UNIT

PAPER NUMBER

2133

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/641,352

Applicant(s)

NAGASAWA ET AL.

Examiner

David Ton

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,7,10 and 13 is/are allowed.
- 6) ☒ Claim(s) 2 and 3 is/are rejected.
- 7) ☒ Claim(s) 5,6,8,9,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicants Remarks filed on 03/29/2005 has been reviewed.
2. Claims 1-13 are presented for examination.
3. Applicant's arguments with respect to claims 2-3 have been considered but are moot in view of the new ground(s) of rejection.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. ' 103(a) as being unpatentable over **Sourgen et al.** (Sourgen) patent no. **5,850,452** in view of **Kadowaki** patent no. **6,282,310**.

As per claim 2:

Sourgen teaches the scrambling circuit including a data storage apparatus [see Fig. 2] comprising a scrambling circuit [permutation circuit DBr1-DBr3 of Fig. 2] for converting an input signal to a desired format, and a storage device for storing converted data [see claim 6].

Sourgen does not teach the scrambling circuit is constituted by a rewritable device.

Kadowaki teaches that a data scrambling circuit [circuit 7 and 18 of Fig. 2] can be any circuit as long as they can set a reversible conversion function, however, a scrambling circuit using RAM has the advantage that the function can be easily changed [see col. 5 lines 11-63 and Fig. 3].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to construct Sourgen's scrambling circuit using RAM as taught by Kadowaki. This modification would have been obvious and a person having ordinary skill in the art would have been motivated to do so because it would provide the advantage that the conversion function can be easily changed as taught by Kadowaki.

7. Claim 3 is rejected under 35 U.S.C. ' 103(a) as being unpatentable over **Sourgen et al.** (Sourgen) patent no. **5,850,452** in view of **Kadowaki** patent no. **6,282,310** and further in view of **Reicher et al.** (Reicher) patent no. **6,389,525**.

As per claim 3:

Sourgen and Kadowaki do not teach the scrambling circuit includes a plurality of conversion circuits each converting said input signal according to different rules and a selector for selecting one of the output of the plurality conversion circuits.

Reichert teaches said scrambling circuit includes a plurality of conversion circuits [RAM 150 and RAM 152 of Fig. 2] each converting said input signal according to different rules [X and Y addresses, see col. 6 lines 39-50] and a selector for selecting one of the output of the plurality conversion circuits [selector 172 of Fig. 2].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Sourgen and Kadowaki with the teachings of Reichert to provide a scrambling circuit using RAM including a plurality of conversion circuits and a selector for selecting one of the output of the plurality conversion circuits as taught by Reichert. This modification would have been obvious and a person having ordinary skill in the art would have been motivated to do so because it would provide the advantage that the conversion function can be easily changed as taught by Kadowaki.

8. Claims 1, 4, 7, 10 and 13 are allowed. Claims 5, 6, 8, 9, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Remarks

10. Applicant argued that (A) prior arts lack of motivation to combine.

As to point (A), the newly cited art, Kadowaki, teaches a scrambling circuit is constituted by a rewritable device because it would provide the advantage that the conversion function can be easily changed.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to construct the scrambling circuit taught by Sourgen using RAM as

taught by Reichert. This modification would have been obvious and a person having ordinary skill in the art would have been motivated to do so because it would provide the advantage that the conversion function can be easily changed as taught by Kadowaki.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Ton whose telephone number is (571) 272-3828. The examiner can normally be reached on M-Th from 5:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Ton
Primary Examiner
Art Unit 2133